

# United States Patent and Trademark Office

UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450 www.uspto.gov

PAPER NUMBER

APPLICATION NO. FILING DA		LING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/784,282	(	02/24/2004	Hsing-Wu Li		9975
	7590	12/02/2005		EXAM	INER
G. LINK CO. LTD				KOCH, GEORGE R	
3550 Bell R	oad				

Minooka, IL 60447

1734

DATE MAILED: 12/02/2005

ART UNIT

Please find below and/or attached an Office communication concerning this application or proceeding.

	Application No.	Applicant(s)	¥
		LI, HSING-WU	
Office Action Summary	10/784,282 Examiner	Art Unit	
•		1734	
The MAILING DATE of this communication	George R. Koch III		_
Period for Reply			
A SHORTENED STATUTORY PERIOD FOR F WHICHEVER IS LONGER, FROM THE MAILIN  - Extensions of time may be available under the provisions of 37 C after SIX (6) MONTHS from the mailing date of this communicati  - If NO period for reply is specified above, the maximum statutory  - Failure to reply within the set or extended period for reply will, by Any reply received by the Office later than three months after the earned patent term adjustment. See 37 CFR 1.704(b).	NG DATE OF THIS COMMUN FR 1.136(a). In no event, however, may a on. period will apply and will expire SIX (6) MO statute, cause the application to become A	CATION. reply be timely filed  NTHS from the mailing date of this communication. BANDONED (35 U.S.C. § 133).	
Status			
<ol> <li>Responsive to communication(s) filed on</li> <li>This action is FINAL.</li> <li>Since this application is in condition for all closed in accordance with the practice un</li> </ol>	This action is non-final.	• •	
Disposition of Claims			
4)  Claim(s) 1-23 is/are pending in the application Papers  4a) Of the above claim(s) 22 and 23 is/are 5)  Claim(s) is/are allowed.  5)  Claim(s) 1,2 and 4-21 is/are rejected.  7)  Claim(s) 3 is/are objected to.  8)  Claim(s) are subject to restriction and application Papers  9)  The specification is objected to by the Example 10)  The drawing(s) filed on is/are: a)  Claim(s) are subjected to by the Example 20  The drawing(s) filed on is/are: a)  Claim(s) are subjected to by the Example 20  The drawing(s) filed on is/are: a)  Claim(s) are subjected to by the Example 20  The drawing(s) filed on is/are: a)  Claim(s) are subjected to by the Example 20  The drawing(s) filed on is/are: a)  Claim(s) are subjected to by the Example 20  The drawing(s) filed on is/are: a)  Claim(s) are subjected to by the Example 20  The drawing(s) filed on is/are: a)  Claim(s) are subjected to by the Example 20  The drawing(s) filed on is/are: a)  Claim(s) are subjected to by the Example 20  The drawing(s) filed on is/are: a)  Claim(s) are subjected to by the Example 20  The drawing(s) filed on is/are: a)  Claim(s) are subjected to by the Example 20  The drawing(s) filed on is/are: a)  Claim(s) are subjected to by the Example 20  The drawing(s) are subjected to by the Example 20  The drawing(s) are subjected to by the Example 20  The drawing(s) are subjected to by the Example 20  The drawing(s) are subjected to by the Example 20  The drawing(s) are subjected to are subjected 20  The drawing(s)	e withdrawn from consideration and/or election requirement.  aminer.  accepted or b) objected to	by the Examiner.	
Applicant may not request that any objection to Replacement drawing sheet(s) including the call.  11) The oath or declaration is objected to by the call.	correction is required if the drawing	g(s) is objected to. See 37 CFR 1.121(d).	
Priority under 35 U.S.C. § 119			
12) Acknowledgment is made of a claim for for a) All b) Some * c) None of:  1. Certified copies of the priority docu 2. Certified copies of the priority docu 3. Copies of the certified copies of the application from the International B * See the attached detailed Office action for	ments have been received. ments have been received in a e priority documents have been ureau (PCT Rule 17.2(a)).	Application No  n received in this National Stage	
Attachment(s)  1) Notice of References Cited (PTO-892)  2) Notice of Draftsperson's Patent Drawing Review (PTO-94  3) Information Disclosure Statement(s) (PTO-1449 or PTO/5 Paper No(s)/Mail Date	8) Paper No	Summary (PTO-413) (s)/Mail Date Informal Patent Application (PTO-152) 	

. . .

#### **DETAILED ACTION**

#### Election/Restrictions

1. Applicant's election without traverse of group I, claims 1-21 in the reply filed on 9/9/2005 is acknowledged.

### Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

- (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.
- 3. Claims 1, 2, 4-9, and 13-19 are rejected under 35 U.S.C. 102(b) as being anticipated by Tsai (US 6,514,854).

Tsai discloses a film sticking/testing equipment, which suitable and capable of applying a plurality of touch pads being adhered with a film and being tested and each of the touch pads at a bottom thereof having a plurality of contact spots, comprising: a transmission mechanism (item 10), having at least an input end and an output end and a delivering path between the input end and the output end; and a film sticking apparatus (items 20 and 30), being disposed above the transmission mechanism behind the input end and on the transmitting path and further comprising: a plurality of rollers; (item 21, 23, 24, 27, 28, and 22), a rolling belt (item 221), providing a surface thereof attached with a protect film and being wound on the rollers; a film

Art Unit: 1734

release base (item 25), having a turning corner, being disposed between any two of the rollers to be touch with the rolling belt; a film adhering device (item 30, 31, and 32), being disposed at a side of the turning corner to keep a spacing from turning corner; and whereby, the touch pads can be delivered with the transmission mechanism from the input end to the output end along the delivering path; the protect film releases from the surface of the rolling belt at the turning corner and is attracted by the film adhering device and is adhered to the upper surface of each of the touch pads.

As to claim 2, Tsai discloses the transmission mechanism connects with test apparatus (such as sensor 11) at the delivering path behind the film adhering device.

Note: Claim 2 is worded broadly enough to comprise any sensor or testing device in the transmission/conveying line.

As to claim 4, Tsai discloses that one of the rollers is a feed roller (item 21) and an end of the rolling belt is fixedly attached the feed roller.

As to claim 5, Tsai discloses that the feed roller is a driven roller (all of the rollers are driven, directly or indirectly, by motor 29).

As to claim 6, Tsai discloses that the another one of the rollers take up roller (item 22) and another end of the rolling belt is fixedly attached to the take up roller.

As to claim 7, Tsai discloses that the take up roller is a driving roller (all of the rollers are driven, directly or indirectly, by motor 29).

As to claim 8, Tsai discloses that a further one of the rollers is a delivering roller (item 27), which is disposed between the feed roller and the take up roller.

A 111 '1 4704

Art Unit: 1734

As to claim 9, Tsai discloses that the delivering roller a driven roller (all of the rollers are driven, directly or indirectly, by motor 29).

Claim 13 is rejected on similar grounds as claim 1 above. Tsai discloses film sticking apparatus suitable for adhering a protect film to the upper surface of a touch pad comprising: a plurality of rollers (item 21, 22, 23, 24, 27, 28); a rolling belt (item 221), providing a surface thereof attached with a protect film and being wound on the rollers; a film release base (item 25), having a turning corner, being disposed between any two of the rollers to be touch with the rolling tape; a film adhering device (item 30), being disposed at a side of the turning corner to keep a spacing from turning corner; whereby, the touch pad can be delivered from the input end to the output end along the delivering path; the protect film releases from the surface of the rolling belt at the turning corner and is attracted by the film adhering device and is adhered to the upper surface of each of the touch pads.

As to claim 14, Tsai discloses that one of the rollers is a feed roller (item 21) and an end of the rolling belt is fixedly attached the feed roller.

As to claim 15, Tsai discloses that the feed roller is a driven roller (all of the rollers are driven, directly or indirectly, by motor 29).

As to claim 16, Tsai discloses that the another one of the rollers take up roller (item 22) and another end of the rolling belt is fixedly attached to the take up roller.

As to claim 17, Tsai discloses that the take up roller is a driving roller (all of the rollers are driven, directly or indirectly, by motor 29).

Art Unit: 1734

As to claim 18, Tsai discloses that a further one of the rollers is a delivering roller (item 27), which is disposed between the feed roller and the take up roller.

As to claim 19, Tsai discloses that the delivering roller a driven roller (all of the rollers are driven, directly or indirectly, by motor 29).

#### Claim Rejections - 35 USC § 103

- 4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
  - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- 5. The factual inquiries set forth in *Graham* v. *John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:
  - 1. Determining the scope and contents of the prior art.
  - 2. Ascertaining the differences between the prior art and the claims at issue.
  - 3. Resolving the level of ordinary skill in the pertinent art.
  - Considering objective evidence present in the application indicating obviousness or nonobviousness.
- 6. Claims 10, 11, 12, 20 and 21 are rejected under 35 U.S.C. 103(a) as being unpatentable over Tsai (US 6,516,854).

As to claim 10 and 20, Tsai discloses that the film adhering device further comprises:

a suction device (item 32); and an actuation device (item 31), being connected to the

suction device for moving the suction device; the suction device having a suction disc (item 32)

Furthermore, official notice is taken that it is well known and conventional for the suction device to further comprises at least a vacuum tube; and for the sucking disc to have provided at the surface thereof a plurality of attracting apertures, being disposed at an end of the vacuum tube and the attracting apertures communicating with the vacuum tube; and sucking air machine, being attached to the vacuum tube. One in the art would appreciate that such structures would enable firm gripping of the applied elements. Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to have used a vacuum tube and sucking apertures in order to afford a firm grip on the applied elements.

As to claim 11 and 21, official notice is taken that it is well known and conventional for the film adhering device to further comprises an alignment device and the alignment device further comprises: a L shaped stop block, being disposed on the sucking disc; and at least an urging piece, being disposed at a lateral side of the sucking disc to push the edge of the protect film against the L shaped stop block. One in the art would appreciate that such elements properly position the applied element (i.e, contact pad, label, etc) prior to application. Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to have used the L-shaped block and urging elements in order to improve application positioning.

As to claim 12, official notice is taken that it is well known and conventional to include a distribution device and the distribution device comprises: at least a bearing

Application/Control Number: 10/784,282 Page 7

Art Unit: 1734

tray for carrying the touch pads (or packages or other substrates); and a sliding servo table, being connected to the bearing tray and actuating the bearing tray to move for dispensing the touch pads (or packages, or other substrates). Such elements improve the manufacturing efficiency and throughput by ensuring a continuous supply of substrates for application. Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to have used the bearing tray and servo tables in order to ensure manufacturing efficiency and throughput.

## Allowable Subject Matter

7. Claims 3 is objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to George R. Koch III whose telephone number is (571) 272-1230 (TDD only). If the applicant cannot make a direct TDD-to-TDD call, the applicant can communicate by calling the Federal Relay Service at 1-866-377-8642 and giving the operator the above TDD number. The examiner can normally be reached on M-F 9-5.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Christopher Fiorilla can be reached on (571) 272-1187. The fax phone

Application/Control Number: 10/784,282 Page 8

Art Unit: 1734

number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

George R. Koefill Primary Examiner Art Unit 1734

GRK 11/28/2005